COLT Challenger AUTOMATIC PISTOL

CALIBER .22



INSTRUCTIONS FOR ASSEMBLY - DISASSEMBLY CLEANING

COLT Challenger AUTOMATIC PISTOL

IN 6 INCH OR 41/2 INCH BARREL



Description of the Challenger

ACTION. The action of this pistol is automatic only in the sense that after firing, the spent shell is extracted from the chamber and a fresh cartridge is stripped from the magazine and fed into the chamber. The trigger must be pulled to fire each shot. The disconnecting mechanism which prevents full automatic action as in a machine gun also prevents firing the pistol if the slide is not fully closed.

SAFETY LOCK. The safety lock, when pushed up, locks the slide from moving back and the sear from moving out from under the hammer when the trigger is pulled. This prevents the arm from being fired until the safety lock is depressed into the unlocked position.

MAGAZINE. The magazine has an easily operable thumbpiece which facilitates loading. The magazine is held in the receiver by a magazine catch located at base of main spring housing. Thumb pressure on this catch releases the magazine.

DUALTONE FINISH. To minimize accuracy-disturbing glare all reflecting areas have a glare-proof "satin" finish with other areas retaining the regular, high polish Colt blue.

Operation of the Challenger

To load the Challenger pull back on the slide and lift safety lock so that it holds slide open. Insert a full magazine making sure that it is in all the way and depress the safety lock.

The slide in closing, strips a cartridge from the magazine and feeds it into the chamber.

The arm is ready to fire. The sequence of operations follows:

- 1. Squeeze trigger.
- 2. Trigger pulls trigger bar forward.
- 3. Trigger bar moves sear out of notch in hammer.
- 4. Hammer is actuated by main spring through hammer strut.
- 5. Hammer strikes firing pin.
- 6. Firing pin moves forward, indents primer and fires cartridge.
- 7. Cartridge explosion drives bullet forward. The blowback opens the slide.
- 8. Slide moves backward, forcing trigger bar down, disconnecting it from sear; carries spent shell back until it hits ejector and is knocked out from under extractor. Further backward motion cocks hammer.
- 9. Slide strikes main spring housing and stops.
- Slide moving forward under pressure of recoil spring, strips a cartridge from the magazine and feeds it into the chamber.
- 11. With slide closed it is necessary to relax finger pressure so that the trigger spring can move trigger forward and trigger bar up to engage the sear.
- 12. Arm is ready to fire second shot.

Disassembly of the Challenger



DISASSEMBLY FOR CLEANING

Make sure that the magazine and chamber are empty!

Remove stocks. Press in on upper radius of main spring housing and, using stock screw, push out housing retainer pin. Housing retainer pin is located on grip part of receiver, under the left stock, directly below the thumb piece of the safety lock.

Hold arm by the barrel in the left hand. Grasp the serrated portion of the slide with the thumb and middle finger of right hand. Pull back slide as far as it will go. Press down assembly lock plunger with forefinger. Let slide move forward. Pressure of recoil spring will be released and slide will feel "free."

Pull trigger to release hammer. Retract slide approximately ½" to allow sear to drop into half cock notch. Then press upward and inward on deep uppermost curve of the main spring housing with the thumb of the right hand. The main spring housing will snap out at the bottom and can be removed along with the sear spring. Remove slide and magazine.

The arm is ready for cleaning.

ASSEMBLY AFTER CLEANING. Place slide on receiver and push to closed position. Insert sear spring in position with lug in slot and top resting on the sear and under the hammer strut. Pull trigger to make sure hammer is fully forward. Insert main spring housing into receiver and snap into place. Insert main spring housing retainer pin and replace stocks.

Complete Disassembly

If it is desired to disassemble the arm completely the following procedure should be followed. Your Challenger is a precision instrument and care should be exercised in disassembly and assembly. Never pound parts together. Line them up and they will go together easily.

FOR THE RECEIVER:

- 1. Remove stocks.
- 2. Remove side plate screw. Remove side plate.
- 3. Lift out safety lock which acts as hammer pin.
- 4. Remove hammer and strut. Strut may be removed from hammer by pushing out strut pin.
- 5. Drive out sear pin. Remove sear.
- 6. Force trigger assembly (trigger, trigger bar and trigger spring) from receiver by pressing trigger from right side.

FOR THE SLIDE:

 Move extractor head back to center of round hole and rotate 180°. Pull forward to remove.

- Lift out firing pin stop using stock screw for that purpose. Firing pin then may be removed.
- Press forward on recoil spring guide with small screw driver. Assembly lock will disengage. Ease recoil spring and guide out of compressed position with screw driver and remove from slide.
- 4. Lift end of assembly lock up and turn assembly lock plunger 90°. Release end of lock and push forward to remove using small hole for purchase.

FOR THE MAGAZINE: Depress plunger in magazine base and slide base off being careful not to lose magazine spring as tension is released. Remove spring and guide. Lift out follower stud at wide part of groove and remove follower.

FOR MAIN SPRING HOUSING: Depress main spring cap and push out pin. Ease main spring and cap out of housing.

Assembly of the Challenger

FOR THE RECEIVER:

 Assemble trigger and trigger bar. Place trigger spring in slot in trigger with one leg against trigger bar and the other projecting to the left. Place trigger on trigger pin. Move leg of spring clockwise into trigger space in receiver. Press trigger down and trigger bar into its slot.

NOTE: Until familiar with this operation, it is advisable to stick a piece of adhesive or scotch tape on receiver in front of the side plate cut to prevent scratching the receiver with the trigger spring or tool being used.

- 2. Place sear in receiver with curved arm forward of trigger bar lug. Drive sear pin into position.
- Assemble hammer, strut and pin. Place in position and insert safety lock. Push safety lock into locked position.
- 4. Place side plate in position. Seat screw firmly.
- 5. Replace stocks.

FOR THE SLIDE:

- Place assembly lock plunger in counter-bored hole in slide. Drop assembly lock into slots in slide and force back into position. Plunger should project through slot in assembly lock.
- 2. Place recoil spring and guide in hole and compress. Push on assembly lock plunger and interlock recoil spring guide with assembly lock.
- 3. Put spring on firing pin and insert in slide with flat on pin towards firing pin stop hole. Push firing pin forward. Insert firing pin stop, large head down. Insert extractor with flat towards firing pin stop. Press in as far as it will go and rotate 180°.

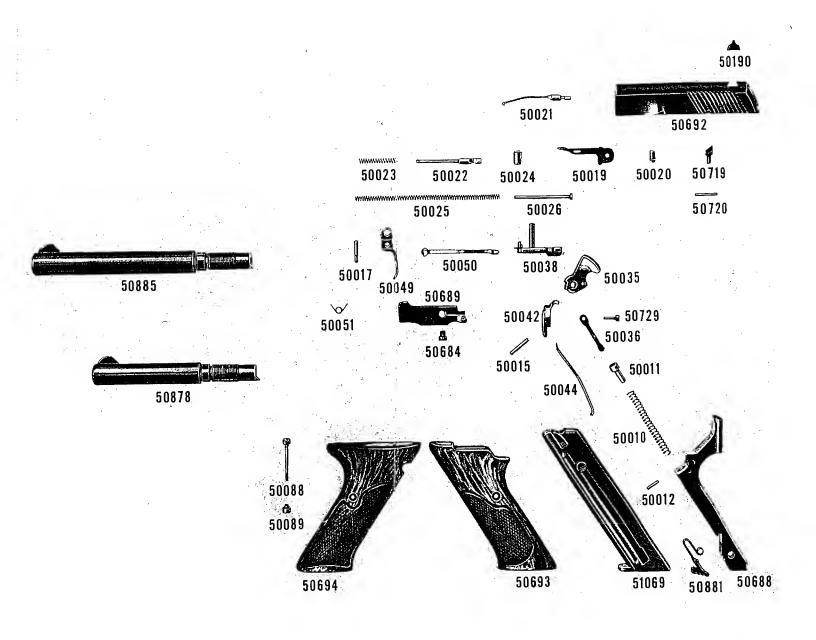
FOR THE MAGAZINE:

 Insert follower in magazine tube and replace follower stud. Replace spring by compressing carefully and, holding it compressed, slide the base into position making sure that the spring guide extension goes into the hole provided for it in the base.

FOR MAIN SPRING HOUSING:

Assemble main spring and cap. Place in housing. Compress and insert pin.

COMPONENT PARTS FOR CHALLENGER PISTOL



50011	Main Spring Cap
50012	Main Spring Cap Pin
50015	Main Spring Housing Retainer Pin
50015	Main Spring Housing Lock Pin
50015	Sear Pin
50017	Trigger Pin
50019	Assembly Lock
50020	Assembly Lock Plunger
50021	Extractor
50022	Firing Pin
50023	Firing Pin Spring

50010 Main Spring

50024	Firing Pin Stop
50025	Recoil Spring
50026	Recoil Spring Guide
50035	Hammer
50036	Hammer Strut
50038	Safety Lock
50042	Sear
50044	Sear Spring
50049	Trigger
50050	Trigger Bar
50051	Trigger Spring
50088	Stock Screw
50089	Stock Screw Nut
50190	Rear Sight

50684	Side Plate Screw
50688	Main Spring Housing
50689	Side Plate
50692	Slide
50693	Stock, L.H.
50694	Stock, R.H.
50719	Ejector
50720	Ejector Pin
50729	Hammer Strut Pin
50878	Barrel (4½ inch)
50881	Magazine Catch
50885	Barrel (6 inch)
51069	Magazine Assembly (10 Shot)

Cleaning the Challenger

A brass rod cleaner with revolving handle and detachable brass wire brush, a hardwood rod with knobbed end, pieces of cotton flannel cut to a size that will fit the bore snugly, and some good cleaning solution (of which there are several good preparations now sold for the purpose), will complete an outfit with which the weapon can be kept in perfect condition. The brass wire brush should be dipped in the cleaning fluid, and the inside of the barrel scrubbed well; wipe out with patches on the end of wood rod until the last cloth comes out clean. Then give the bore and all parts a good coating of oil.

Never leave a gun in a leather holster for any length of time. Leather absorbs moisture, which will cause the weapon to rust.

Be very careful in all cleaning not to injure the rifling at MUZZLE of pistol. Never reverse direction while running a brass wire brush through the bore. Pass it through until it emerges from the muzzle end then repeat the procedure.

2-53